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10/717,892	11/20/2003	Robert A. Koch	BS02301CON2 (KS-02301)	9410
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Scott P. Zimmerman			RAMOS FELICIANO, ELISEO	
P.O. Box 3822 Cary, NC 275	19	•	ART UNIT	PAPER NUMBER
•			2687	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	-72
	10/717,892	KOCH ET AL.	
Office Action Summary	Examiner	Art Unit	
	Eliseo Ramos-Feliciano	2687	
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet with t	he correspondence address -	
A SHORTENED STATUTORY PERIOD FOR REPL	VIS SET TO EXPIRE 3 MON	TH(S) EDOM	
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replif NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply ly within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS e, cause the application to become ABANE	be timely filed)) days will be considered timely. from the mailing date of this communication ONED (35 U.S.C. § 133).	ation.
Status	•		
1) Responsive to communication(s) filed on 20 N	lovember 2003.		
·= · · · · · · · · · · · · · · · · · ·	s action is non-final.		
3) Since this application is in condition for allowa	ince except for formal matters	, prosecution as to the merits	s is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application	1.		
4a) Of the above claim(s) is/are withdra			
5) Claim(s) is/are allowed.	•		
6)⊠ Claim(s) <u>1-19</u> is/are rejected.		,	
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.	•	
Application Papers	·		
9)⊠ The specification is objected to by the Examine	ar .		
10)⊠ The drawing(s) filed on <u>20 November 2003</u> is/a		iected to by the Evaminar	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct			1(d)
11) The oath or declaration is objected to by the Ex			• •
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	a priority under 25 U.S.C. S.44	0(a) (d) a (5)	
a) ☐ All b) ☐ Some * c) ☐ None of:	i priority under 35 U.S.C. § 11	9(a)-(a) or (t).	
1. ☐ Certified copies of the priority document	ts have been received		
2. Certified copies of the priority document		ection No	
3. Copies of the certified copies of the prior	· •		,
application from the International Burea		cived in this National Stage	
* See the attached detailed Office action for a list	• • • •	eived.	
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• • • • • • • • • • • • • • • • • • • •			
Attachment(s) 1) X Notice of References Cited (PTO-892)	A) []	non. (DTO 442)	
2) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Sumr Paper No(s)/Ma	nary (PTO-413) nil Date	
3) 🛛 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Inform	nal Patent Application (PTO-152)	
Paper No(s)/Mail Date <u>3/23/2004</u> .	6) Other:)	

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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DETAILED ACTION

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement filed on March 23, 2004 have been considered by the examiner (see attached PTO-1449 form).

Abstract

2. The abstract of the disclosure is objected to because it contains legal phraseology such as "means" (see e.g. line 8). Correction is required. See MPEP § 608.01(b).

Specification

- 3. The disclosure is objected to because of the following informalities: the reference to a US Patent Application made in page 2, paragraph 0002 needs to identify the called out application by application number, filing date and current status (e.g. pending, abandoned, or patented and patent number). Appropriate correction is required.
- 4. The disclosure is objected to because of the following informalities: in page 6, paragraph 0014, line 5, reads "the wireline network.", should be --the wireline network).-- (typographical error: missing end parenthesis). Appropriate correction is required.

Claim Objections

- 5. Claim 1 is objected to because of the following informalities: in line 6 it reads "said telephony device;", should be --said telephony device; and-- for clarity and precision of language. Appropriate correction is required. For examination on the merits the limitation is read as suggested.
- 6. Claim 2 is objected to because of the following informalities: in line 3 the claim recites "said wireline service-providing network"; however, the claim provides support for "a service-

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providing network" as recited in claim 1, line 2. Appropriate correction is required. For examination on the merits the limitation is read as --said service-providing network--.

- 7. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 7 depends on claim 7. It appears that the claim is intended to depend on claim 6 instead. For examination on the merits claim 7 will be treated as if dependent on claim 6.
- 8. Claim 13 is objected to because of the following informalities: in line 2 the claim recites "said virtual telephone number"; however, the claim provides support for "a telephone number" as recited in claim 11, line 6. Appropriate correction is required. For examination on the merits the limitation is read as --said telephone number--.
- 9. Claim 14 is objected to because of the following informalities: line 2 ends with "and.", should be --and-- (no period after "and") since it is not the end of the claim. "Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations" MPEP 608.01(m). Appropriate correction is required.
- 10. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 depends on claim 17. It appears that the claim is intended to depend on claim 14 instead. For examination on the merits claim 15 will be treated as if dependent on claim 14.

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Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 12. Claims 6 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 13. Claim 6 recites the limitation "said first directory number" in line 4. There is insufficient antecedent basis for this limitation in the claim.

For examination on the merits, the recited limitation will be read as --said virtual telephone number-- in view of the specification, page 13, paragraph 0032, lines 1-3.

14. Claim 14 recites the limitation "said first directory number" in line 3. There is insufficient antecedent basis for this limitation in the claim.

For examination on the merits, the recited limitation will be read as --said telephone number-- in view of the specification, page 13, paragraph 0032, lines 1-3.

Double Patenting: Issue I

15. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

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16. Claims 1-19 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-19, respectively, of copending Application No. 10/648,525. This is a <u>provisional</u> double patenting rejection since the conflicting claims have not in fact been patented.

Regarding claims 1-19 of present application, claims 1-19, respectively, of copending Application No. 10/648,525 are identical.

Double Patenting: Issue II

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1, 4-5, 8-12 and 16-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims (applied below) of copending Application No. 10/245,153 (simply "10/245,153" hereinbelow) in view of Jones et al. (US Patent Number 6195,422).

Regarding **claim 1** of the present application, claim 1 of copending Application No. 10/245,153 reads as follows:

[&]quot;1. A method for providing a service to a telephony device, comprising:

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providing a telephone number in a wireline service-providing network, wherein said telephone number utilizes a telecommunications service provided by a first element of said wireline service-providing network;

associating a wireless telephony device with said telephone number;

receiving a call directed to said telephone number;

providing said telecommunications service to said call; and

routing said call to a wireless native transport network in communication with said wireless telephony device" (emphasis added).

Claims 7 and 8 of copending Application No. 10/245,153 further disclose billing or charging the subscriber for the telecommunications service to the call.

The limitation "for monitoring telecommunications usage" found in the preamble of claim 1 of the present application merely recites the purpose of the claimed process, and the body of the claim does not depend on the preamble for completeness but, instead, the process steps are able to stand alone.

The telephone number taught by the claim(s) cited above is characterized as a "virtual telephone number" as called out by claim 1 of the present application because they both perform the same function.

Even though 10/245,153 disclose billing as explained above, 10/245,153 fail to specify the further step of "monitoring a duration of said call".

Jones et al. discloses a method including monitoring a duration of a call for billing purposes. After accepting a call (step S14 – Figure 4) the service-providing system/ network (CCS 18), routes the call (step S16 – Figure 4), monitors the duration of the call and generates a bill (step S17 – Figure 4); see column 14, lines 4-19 (especially line 8). Jones et al.'s method has the advantage of providing for better accuracy of billing since the call is monitored and timed.

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in copending Application No. 10/245,153 as suggested by claims 7 and 8 by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

Regarding **claim 4** of the present application, claim 1 of copending Application No. 10/245,153 teaches a wireless telephony device as claimed.

Regarding **claim 5** of the present application, claim 1 of copending Application No. 10/245,153 teaches a wireline service-providing network as claimed.

Regarding **claim 8** of the present application, claim 1 of copending Application No. 10/245,153 teaches a wireless native transport network as claimed.

Regarding **claim 9** of the present application, as explained above for *claim 1* of the present application, the combination of claims 1, 7 and 8 of copending Application No. 10/245,153 and Jones et al. teach billing a telecommunications provider of said native transport network for said monitoring (telecommunications service).

Regarding **claim 10** of the present application, as explained above for *claim 1* of the present application, the combination of claims 1, 7 and 8 of copending Application No. 10/245,153 and Jones et al. teach billing a subscriber (customer) based on said duration of said call as claimed (see e.g. S17 and S19 - Figure 4 of Jones et al.).

Regarding **claim 11** of the present application, claim 9 of copending Application No. 10/245,153 reads as follows:

"9. A system for providing a service to a wireless device, comprising:

a wireless telephony device;

a wireless native transport network in communication with said wireless telephony device;

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a wireline service-providing network in communication with said native transport network;

a telephone number associated with said wireline service-providing network and with said wireless telephony device;

a first element in said wireline service-providing network, wherein said first element is operable for providing a telecommunications service to a call directed to said wireless telephony device".

Even though 10/245,153 disclose billing (claims 7 and 8), 10/245,153 fail to specify the further step of "monitoring a duration of a call".

Jones et al. discloses a method including monitoring a duration of a call for billing purposes. After accepting a call (step S14 – Figure 4) the service-providing system/ network (CCS 18), routes the call (step S16 – Figure 4), monitors the duration of the call and generates a bill (step S17 – Figure 4); see column 14, lines 4-19 (especially line 8). Jones et al.'s method has the advantage of providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in copending Application No. 10/245,153 as suggested by claims 7 and 8 by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

Regarding claim 12 of the present application, claim 9 of copending Application No. 10/245,153 teaches a wireless telephony device as claimed.

Regarding **claim 16** of the present application, claim 11 of copending Application No. 10/245,153 teaches wherein said service-providing network comprises an Advanced Intelligent Network (AIN).

Regarding **claim 17** of the present application, claim 12 of copending Application No. 10/245,153 teaches wherein said service-providing network comprises a packet-switching network.

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Regarding claim 18 of the present application, claim 14 of copending Application No. 10/245,153 teaches wherein said first element comprises a service control point (SCP).

Regarding **claim 19** of the present application, claim 15 of copending Application No. 10/245,153 teaches wherein said first element comprises a media gateway controller.

19. This is a <u>provisional</u> obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

- 20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 21. Claims 1-2, 4-8, 10-12, 14-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (US Patent Number 6,775,546) in view of Jones et al. (US Patent Number 6195,422).

Regarding **claim 1**, Fuller discloses a method for monitoring telecommunications usage (Figures 2 and 3), including:

providing a virtual telephone number ("common" or "virtual fixed line number" column 3, lines 31-38) in a service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44);

associating a telephony device (mobile handset 21 – Figure 2) with said virtual telephone number (column 3, lines 39-45; column 5, lines 4-8);

receiving a call directed to said virtual telephone number (step 300 - Figure 3; column 8, line 55);

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routing said call to a native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47); in communication with said telephony device (step 303 – Figure 3; column 10, lines 12-14). (See also column 5, lines 9-27).

Even though Fuller discloses billing or charging for the call in a fixed-to-mobile basis (column 10, lines 15-17), he fails to specifically disclose monitoring the duration of the call as claimed by applicant.

Jones et al. discloses a method including monitoring a duration of a call for billing purposes. After accepting a call (step S14 – Figure 4) the service-providing system/ network (CCS 18), routes the call (step S16 – Figure 4), monitors the duration of the call and generates a bill (step S17 – Figure 4); see column 14, lines 4-19 (especially line 8). Jones et al.'s method has the advantage of providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in Fuller's invention as suggested by himself by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

Regarding **claim 2**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller discloses that "there is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" (column 2, lines 3-6). "The SCP 43 ... converts the number to an MSISDN" (column 5, line 57; see also column 8, lines 55-57). Therefore, inherently, storing said virtual telephone number in a database in said service-providing network

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(SCP 43 includes a database – column 8, line 48; HLR 44 includes a database – column 5, line 30; SCP 43 / HLR 44 either singularly or in combination read as the claimed database).

Regarding **claim 4**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller discloses that the telephony device is a telephony device selected from the group consisting of a wireline telephony device, a wireless telephony device, and a packet-based telephony device. For example, wireless mobile handset 21 or wireline "telephony" device 48a – Figure 2.

Regarding **claim 5**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller discloses that the service-providing network is a network selected from the group consisting of a wireline network, a wireless network, and a packet-switching network. For example, wireline/fixed-line network (depicted in Figure 2 at least including elements 41, 42, 43, 44).

Regarding claim 6, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller discloses that the telephony device includes an identifier (MSISDN – column 3, lines 39-40). Fuller further discloses associating said telephony device with said virtual telephone number including storing said identifier and said number in a database ("there is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" – column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" – column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database – column 8, line 48. HLR 44 includes a database – column 5, line 30. Therefore, SCP 43 / HLR 44 either singularly or in combination read as the claimed database).

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Regarding **claim 7**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 6*). In addition, Fuller discloses that the database (HLR 44) inherently includes a subscriber profile (data relating to the mobile unit 21 – column 5, line 35).

Regarding **claim 8**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller discloses that the native transport network is a network selected from the group consisting of a wireline network, a wireless network, and a packet-switching network. For example, wireless network (depicted in Figure 2 at least including elements 21, 30, 47).

Regarding **claim 10**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). In addition, Fuller further discloses billing the subscriber (user; account) based on the duration of the call ("billing system 49 [...] generates billing information for charges incurred by the user of the handset 21" – column 5, lines 44-46; "billing system 49 is controlled to charge the common number account for the fixed-to-mobile leg of the call" – column 10, lines 15-17). Jones et al. also discloses billing the subscriber (customer) based on a duration of the call (step S19 – Figure 4).

Regarding **claim 11**, Fuller discloses a system (Figure 2) for providing a service to a wireless device (21), including:

a telephony device (mobile handset 21 – Figure 2);

a native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47) in communication with said telephony device;

a service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44) in communication with said native transport network;

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a telephone number ("common" or "virtual fixed line number" column 3, lines 31-38) associated with said service-providing network and with said telephony device (column 3, lines 39-45; column 5, lines 4-8);

a first element (GMSC 42, SCP 43, billing system 49, or in combination) in said service-providing network. (See also column 8, lines 53-67, column 10, lines 11-19).

Even though Fuller discloses billing or charging for a call directed to the mobile handset 21 (telephony device) in a fixed-to-mobile basis (column 10, lines 15-17), he fails to specifically disclose monitoring the duration of the call directed to said telephony device, as claimed.

Jones et al. discloses a method including monitoring a duration of a call for billing purposes. After accepting a call (step S14 – Figure 4) the service-providing system/ network (CCS 18), routes the call (step S16 – Figure 4), monitors the duration of the call and generates a bill (step S17 – Figure 4); see column 14, lines 4-19 (especially line 8). Jones et al.'s method has the advantage of providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in Fuller's invention as suggested by himself by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

Regarding **claim 12**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). In addition, Fuller discloses that the telephony device is a telephony device selected from the group consisting of a wireline telephony device, a wireless telephony device, and a packet-based telephony device. For example, wireless mobile handset 21 or wireline "telephony" device 48a - Figure 2.

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Regarding **claim 14**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). In addition, Fuller discloses an identifier (MSISDN – column 3, lines 39-40) of said telephony device; and a database (SCP 43 / HLR 44 either singularly or in combination) for storing the identifier and the telephone number ("there is an association in the switching network between this number and the MSISDN, such that incoming calls made to the virtual fixed-line number are translated to the MSISDN number" – column 2, lines 3-6. "The SCP 43 ... converts the number to an MSISDN" – column 5, line 57; see also column 8, lines 55-57. SCP 43 includes a database – column 8, line 48. HLR 44 includes a database – column 5, line 30. Therefore, SCP 43 / HLR 44 either singularly or in combination read as the claimed database).

Regarding **claim 15**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 14*). In addition, Fuller discloses that the database (HLR 44) inherently includes a profile (data-relating to the mobile unit 21 – column 5, line 35).

Regarding **claim 16**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). In addition, Fuller's service-providing network is characterized as an advanced intelligent network as claimed. Furthermore, Jones et al.'s service-providing network is an advanced intelligent network as claimed (column 5, line 10).

Regarding **claim 18**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). In addition, Fuller discloses that the first element includes a service control point (SCP 43 – Figure 2).

Regarding **claim 19**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). In addition, Fuller discloses that the first element includes a media gateway controller (GMSC 42 – Figure 2).

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Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (US Patent Number 6,775,546) in view of Jones et al. (US Patent Number 6195,422) as applied to claims 1 and 11, respectively, above, and further in view of Tayloe (US Patent Number 5,933,785).

Regarding **claim 3**, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 1*). However, they fail to specifically disclose storing the virtual telephone number in a memory device of the telephony device as claimed by applicant.

Tayloe discloses a telephone 101 (telephony device) having a SIM card 105 (memory device) for storing a temporary or universal telephone number (virtual telephone number) — abstract and column 3, lines 39-41. One advantage of Tayloe's invention is that "a single phone may respond to incomming calls for different number of telephone numbers" — see abstract. The temporary telephone number can be, for example, a wireline number — column 3, lines 50-54 and column 3, lines 45-47. Another advantage of Tayloe's invention is that the "universal identification number capability allows a person to accept calls at a single communication device for either his personal number, his work number or for both at the same time". Also "several different people each with different numbers (on one SIM card) can receive secure calls on a common communications device on a dynamic basis" — column 3, lines 55-61.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store the virtual telephone number in a memory device of Fuller and Jones et al.'s telephony device because this would allow a single phone to respond to incoming calls for different number of telephone numbers, and/or allow a person to accept calls at a single communication device for either his personal number, his work number or for both at the same

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time, and/or allow several different people each with different numbers to receive secure calls on a common communications device on a dynamic basis, as suggested by Tayloe.

Regarding claim 13, Fuller and Jones et al. disclose everything claimed as applied above (see *claim 11*). However, they fail to specifically disclose that the telephony device includes a memory device, and that the telephone number is stored in the memory device as claimed by applicant.

Tayloe discloses a telephone 101 (telephony device) having a SIM card 105 (memory device) for storing a temporary or universal telephone number (virtual telephone number) — abstract and column 3, lines 39-41. One advantage of Tayloe's invention is that "a single phone may respond to incomming calls for different number of telephone numbers" — see abstract. The temporary telephone number can be, for example, a wireline number — column 3, lines 50-54 and column 3, lines 45-47. Another advantage of Tayloe's invention is that the "universal identification number capability allows a person to accept calls at a single communication device for either his personal number, his work number or for both at the same time". Also "several different people each with different numbers (on one SIM card) can receive secure calls on a common communications device on a dynamic basis" — column 3, lines 55-61.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Fuller and Jones et al.'s invention with a memory device to store the telephone number because this would allow a single phone to respond to incoming calls for different number of telephone numbers, and/or allow a person to accept calls at a single communication device for either his personal number, his work number or for both at the same

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time, and/or allow several different people each with different numbers to receive secure calls on a common communications device on a dynamic basis, as suggested by Tayloe.

23. Claims 1, 9, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (US Patent Number 6,775,546) in view of Dent (US Patent Application Publication Number 2003/0050100).

Regarding **claim 1**, Fuller discloses a method for monitoring telecommunications usage (Figures 2 and 3), including:

providing a virtual telephone number ("common" or "virtual fixed line number" column 3, lines 31-38) in a service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44);

associating a telephony device (mobile handset 21 – Figure 2) with said virtual telephone number (column 3, lines 39-45; column 5, lines 4-8);

receiving a call directed to said virtual telephone number (step 300 – Figure 3; column 8, line 55);

routing said call to a native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47); in communication with said telephony device (step 303 – Figure 3; column 10, lines 12-14). (See also column 5, lines 9-27).

Even though Fuller discloses billing or charging for the call in a fixed-to-mobile basis (column 10, lines 15-17), he fails to specifically disclose monitoring the duration of the call as claimed by applicant.

Dent discloses a method including monitoring a duration of a call (steps 206-212 – Figure 4) for billing purposes (step 214 – Figure 4); see paragraph 0027. "Apart from the economic

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benefits, communication quality benefits from the ability to access a larger number of antenna sites 12 allowing more frequent use of transmit and receive diversity to improve communications" – paragraph 0028. Another advantage is providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in Fuller's invention as suggested by himself by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

Regarding claim 9, Fuller and Dent disclose everything claimed as applied above (see *claim 1*). In addition, Dent discloses billing a telecommunications provider of a native transport network for said monitoring; see paragraph 0016, especially last sentence, paragraph 0027, especially last three sentences, and paragraph 0026, especially last two sentences. Dent's method has several advantages such as cross-bill (paragraph 0026, last two sentences), and enhanced roaming services (paragraph 0006).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Fuller for billing a telecommunications provider of a native transport network for said monitoring for the advantage of cross-billing and allowing enhanced roaming services.

Regarding **claim 11**, Fuller discloses a system (Figure 2) for providing a service to a wireless device (21), including:

a telephony device (mobile handset 21 – Figure 2);

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a native transport network (the network depicted in Figure 2 at least including elements 21, 30, 47) in communication with said telephony device;

a service-providing network (the network depicted in Figure 2 at least including elements 41, 42, 43, 44) in communication with said native transport network;

a telephone number ("common" or "virtual fixed line number" column 3, lines 31-38) associated with said service-providing network and with said telephony device (column 3, lines 39-45; column 5, lines 4-8);

a first element (GMSC 42, SCP 43, billing system 49, or in combination) in said service-providing network. (See also column 8, lines 53-67, column 10, lines 11-19).

Even though Fuller discloses billing or charging for a call directed to the mobile handset 21 (telephony device) in a fixed-to-mobile basis (column 10, lines 15-17), he fails to specifically disclose monitoring the duration of the call directed to said telephony device, as claimed.

Dent discloses a method including monitoring a duration of a call (steps 206-212 – Figure 4) for billing purposes (step 214 – Figure 4); see paragraph 0027. "Apart from the economic benefits, communication quality benefits from the ability to access a larger number of antenna sites 12 allowing more frequent use of transmit and receive diversity to improve communications" – paragraph 0028. Another advantage is providing for better accuracy of billing since the call is monitored and timed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor the duration of the call in Fuller's invention as suggested by himself by teaching billing or charging for the call because such monitoring provides for accuracy of billing.

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Regarding **claim 17**, Fuller and Dent disclose everything claimed as applied above (see *claim 11*). In addition, Dent discloses that the service-providing network includes a packet-switching network (IP-based communications or Internet network –paragraph 0025, especially last line).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to includes a packet-switching network capabilities in Fuller's invention because this would enable Internet access as suggested by Dent.

Conclusion

24. Any inquiry concerning this communication from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is 703-305-0078. The examiner can normally be reached from 8:00 a.m. to 5:30 p.m. on 5-4/9 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid, can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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November 4, 2004.

ELISEO RAMOS-FELICIANO PATENT EXAMINER